

L68 ANSWER 61 OF 135 CAPLUS COPYRIGHT 1999 ACS  
 ACCESSION NUMBER: 1989:43989 CAPLUS  
 DOCUMENT NUMBER: 110:43989  
 TITLE: **Coloring** of natural marble and marble articles  
 INVENTOR(S): Xiao, Chunmo; Li, Liandeng; et al.  
 PATENT ASSIGNEE(S): Yantai University, Peop. Rep. China  
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
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 PATENT INFORMATION:

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---|------|----------|-----------------|----------|
|    | <del>CN 86104010</del>  | A    | 19871230 | CN 86-104010    | 19860616 |
|    | CN 1006619  | B    | 19900131 |                 |          |
| AB | A film of light-sensitive material, i.e., <u>AgNO3 soln.</u> , and a reducing agent mixt. of <u>NaOH</u> 10-15%, <u>formaldehyde</u> 25-30, and <u>H2O</u> 55-65 wt.% are <u>glazed stepwise</u> on the surface of natural marble for decoration by handwriting, drawing, and artificial designs. Both reagents penetrate into the microvoids of the marble in the area to be decorated, and <u>react</u> to form Ag deposits. Black markings show after the marble is exposed to sunlight. The depth of penetration and the intensity of the color of the decoration are controlled by varying the soaking and diffusion time of the |      |          |                 |          |
|    | AgNO3 soln. inside the marble and the concn. of both reagents.  |      |          |                 |          |
| TI | <b>Coloring</b> of natural marble and marble articles   |      |          |                 |          |
| IT | <b>1310-73-2</b> , Sodium hydroxide, uses and miscellaneous   |      |          |                 |          |
|    | RL: USES (Uses)   |      |          |                 |          |
|    | (pH control by, in silver nitrate reaction with formaldehyde in marble for decoration)  |      |          |                 |          |
| IT | <b>7761-88-8</b> , Silver nitrate, reactions  |      |          |                 |          |
|    | RL: RCT (Reactant)  |      |          |                 |          |
|    | (reaction of light-sensitive, with formaldehyde, for decoration of marble)  |      |          |                 |          |